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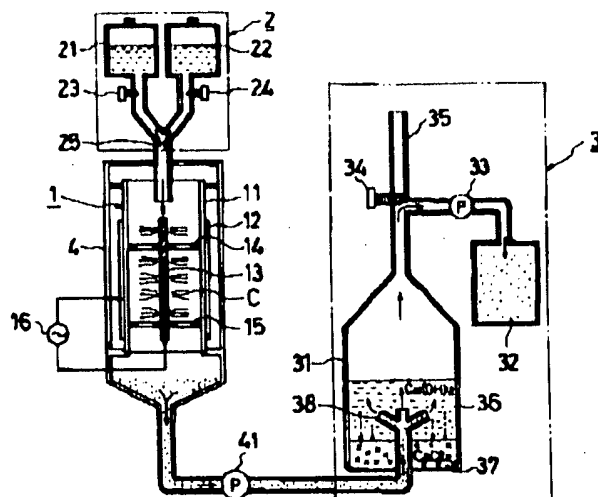
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APPLICANT : NILES PARTS CO LTD;

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TITLE : FLUOROCARBON DECOMPOSITION
TREATMENT APPARATUS USING
DISCHARGE PLASMA



ABSTRACT : PROBLEM TO BE SOLVED: To perform the decomposition treatment of fluorocarbon by using electron collision energy obtained by brush discharge being one kind of discharge plasma without requiring a large scale high temp. generation means such as a high temp. and high pressure reaction tank or an incinerator for the decomposition treatment of fluorocarbon.

SOLUTION: An injection part 2 is disposed to the front stage of a reactor 1 generating discharge plasma and a decomposed substance recovery part is disposed to the rear stage thereof. The reactor 1 is equipped with a pipe 11 formed into a cylindrical shape from a dielectric material such as quartz, the outside electrode 12 fitted to the outer surface of the pipe 11, the center electrode 13 fitted on the center line of the internal space of the pipe 11 and formed into a spiral shape, the supports 14, 15 fixing the center electrode 13 on the center axis of the pipe 1 and an electrode 16 applying high voltage across both electrodes 12, 13. Fluorocarbon and water are injected into the reactor 1 from the injection part 2 and a decomposition product of fluorocarbon obtained by plasma treatment in the reactor 1 is stored in a decomposed substance recovery part 3.

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